



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

RECORD OF AMERICAN ZOOLOGY.

BY J. S. KINGSLEY.

IT is the intention to catalogue here in systematic order all papers relating to the Zoology of North America, beginning with the year 1889. To the title and reference will be added such notes upon the contents of the papers as will make the record more valuable to the student. An asterisk indicates that the paper has not been seen by the recorder. Authors are requested to send copies of their papers to J. S. Kingsley, Lincoln, Nebraska.

GENERAL.

WILSON, H. V.—On the Breeding Seasons of Marine Animals in the Bahamas. J. H. U. Circ., VIII., p. 38.—Sponges, Gorgonids, Corals, Annelids. Chiton, *Aplysia*, *Anolis*, *Gonodactylus*.

WILSON, H. V.—Report as Bruce Fellow of the Johns Hopkins University. J. H. U. Circ., VIII., p. 40, 1889.—Account of work at Bahamas, including notice of sense organs in Hoplophora.

HERRICK, F. H.—Days and Nights by the Sea. AM. NAT., XXIII., p. 406. 1889.

STEARNS, R. E. C.—Instances of the Effects of Musical Sounds on Animals. AM. NAT., XXIV., p. 22. 1890.

HEILPRIN, ANGELO.—The Bermuda Islands: A Contribution to the Physical History and Zoology of the Somers Archipelago, [Etc.] Philadelphia, 1889.—Reprints from the Proceedings of the Academy of Natural Sciences of Philadelphia.

PACKARD, A. S.—Cave Fauna of North America; with Remarks on the anatomy of the brain and origin of the blind species. Memoirs Nation. Acad. Sci., Vol. IV., p. 1. 1889.—Vide Infra.

PROTOZOA.

LEIDY, JOSEPH.—On several Gregarines and a singular mode of conjugation of one of them. Proc. Phila. Acad., 1889, p. 9.—Describes *Gregarina philica* from *Nyctobates pennsylvanicus*, *G. actinotus* from *Scolopocryptops sexspinosus*, *G. megacephala*

from *Cermatia forceps*, *G. microcephala* from *Hoplocephala bicornis*. The paper is reproduced in *Journal de Micrographie*, Nov., 1889.

RYDER, J. A.—The Polar Differentiation of *Volvox* and the Specialization of possible Sense Organs. *AM. NAT.*, XXIII., p. 218, 1889. (See *Proc. Phila. Acad.*, 1889, p. 138.)

KELLCOTT, D. S.—Intestinal Parasitic Infusoria of Frogs. *Microscope*, IX., p. 46, 1889.—Presence of *Nyctotherus cordiformis*.

S——, H. M.—A Note on *Diffugia urceolata*. *Microscope*, IX., p. 307. 1889.—*Diffugia* leaving its shell.

LATHAM, V. DA L.—Short Notes in Practical Biology.—*Amoeba*. *Am. Mo. Micros. Jour.*, X., p. 151.—Laboratory work; nothing new.

HARGITT, C. W.—Methods of Mounting Infusoria. *Am. Mo. Micros. Jour.*, X., p. 183. 1889.—Kill by corrosive sublimate or Lang's fluid, dehydrate by alcohol, and mount in balsam.

SPONGES.

LEIDY, JOSEPH.—The boring sponge *Cliona*. *Proc. Acad. N. S. Philadelphia*, 1889, p. 70.—Describes supposed new species, *C. phallica*, from Florida, and gives resumé of known facts.

CCELENERATA.

McMURRICH, J. PLAYFAIR.—A contribution to the Actinology of the Bermudas. *Proc. Phila. Acad.*, 1889, p. 102, Pls. VI., VII. —Anatomical Notes on *Aiptasia* sp., *Condylactis passiflora*, *Oulactis fasciculata* (nov.), *Diplactis* (nov.) *bermudensis* (nov.), *Zoanthus flosmaris*, *Mammillifera tuberculata*, *Corticifera ocillata*, *C. glaveola*, and *Gemmaria rusei*.

McMURRICH, J. PLAYFAIR.—The Actinaria of the Bahama Islands, W. I. *Jour. Morph.*, III., p. 1 (see *AM. NAT.*, XXIV., p. 80). An elaborate paper upon the structure of *Aiptasia annulata*, *A. tagetes*, *Condylactis passiflora*, *Bunodes tæniatus*, *Aulactinia steloides* (nov.), *Lebrunea neglecta*, *Discosoma anemone*, *Rhodactis sancti-thomæ*, *Heteranthus floridus*, *Phymanthus crucifer*, *Oulactis flosculifera*, *Zoanthus sociatus*, *Gemmaria isolata* (nov.), and *Corticifera flava*.

McMURRICH, J. PLAYFAIR.—List of Actinaria found at New Providence, Bahama Islands. J. H. U. Circ., VIII., p. 30, 1889.

McMURRICH, J. PLAYFAIR.—On the occurrence of an Edwardisia stage in the free-swimming embryo of a Hexactinian. J. H. U. Circ., VIII., p. 31, 1889.

WILSON, H. V.—On the Occasional Presence of a Mouth and Anus in the Actinozoa. J. H. U. Circ., VIII., p. 37.—Closure of Mouth of *Cereactis bahamensis* in the middle.

MORGAN, T. H.—Notice of Dr. H. V. Wilson's paper on the Development of *Manicina areolata*. J. H. U. Circ., VIII., p. 39, 1889.

FEWKES, J. W.—On a Few Californian Medusæ. AM. NAT., XXIII., p. 591, 1889.

FEWKES, J. W.—Physalia in the Bay of Fundy. AM. NAT., XXIII., p. 821, 1889.

FEWKES, J. W.—Emission of a Colored Fluid as a Possible Means of Protection Resorted to by Medusæ. *Microscope*, IX., p. 65, 1889.

McMURRICH, J. P.—Note on the Structure and Systematic Position of *Lebrunea neglecta*. Zool. Anz., XII., p. 38, 1889.

VALENTINE, H. E.—An Observation on the Common Hydra. *Microscope*, IX., p. 374, 1889.

ECHINODERMS.

IVES, J. E.—Variations in *Ophiura panamensis* and *Ophiura teres*. Proc. Phila. Acad., 1889, p. 76.

EDWARDS, B. L.—Notes on the Embryology of *Mulleria agassizii*. J. H. U. Circ., VIII., p. 37, 1889 (see AM. NAT., XX., p. 845).

HODGE, C. F.—A Study of the Oyster Beds of Long Island Sound, with Reference to the Ravages of Starfish. J. H. U. Circ., VIII., p. 102, 1889.

FEWKES, J. W.—Excavating habits of our Common Sea-Urchin. AM. NAT., XXIII., p. 728, 1889.

FEWKES, J. W.—On Excavations made by Sea-Urchins. AM. NAT., XXIV., p. 1, 1890.

PLATHELMINTHES.

PACKARD, A. S.—The Cave Fauna of North America. Mem. Nat. Acad. Sci., IV., 1889.—Describes *Vortex* (?) *cavicolus* and *Dendrocælum percæcum*.

NEMATODA.

BULLOCK, EDWARD A.—Ova of *Trichocephalus dispar* in the liver of Rat. *Am. Mo. Micro. Jour.*, X., p. 193, 1889.

MARK, E. L.—Trichinæ in Swine. Ann. Rep. Mass. State Board of Health for 1888, p. 113. 1889.—Results of examinations of 4186 hogs.

ANNELIDS.

WHITMAN, C. O.—Some new facts about the Hirudini. *Jour. Morph.*, II., p. 586.—A preliminary paper largely devoted to sense organs.

CHANEY, L. W.—Histology of the Earth-worm. *Microscope*, IX., p. 196. Plate. 1889.—Nothing new.

BEDDARD, F. E.—Note upon the green cells in the integument of *Æolosoma tenebrarum*. Proc. Zool. Soc., London, 1889, p. 51.—In foot-note gives notes on Cragin's species of *Æolosoma*.

PROSOPYGII.

STOKES, A. C.—The Statoblasts of our Fresh-water Polyzoa. *Microscope*, IX., p. 257, 1889.—A popular account with keys to Statoblasts and to genera of fresh-water Polyzoa.

ANDREWS, E. A.—Reproductive organ of *Phascolosoma gouldii*. *Zool. Anzeiger*, XII., p. 140, 1889.—Reproductive organs fimbriated bands, running from nerve cord along posterior retractors. Attempts at artificial impregnation unsuccessful.

MOLLUSCS.

PILSBRY, HENRY A.—New and little known American Molluscs. Proc. Phila. Acad., 1889, p. 81, 3 Plates.—Describes as new *Holospira elizabethæ* from S. W. Mexico, *Pæcilozonites reinianus* var. *goodei* from Bermuda, *Bithynella æquicostata* from Florida, *Amnicola peracuta* from Texas, *Sphærium* (Limsima)

singleyi from Texas. Notes were given on synonymy and distribution of *Helix* (*Microphysa*) *hypolepta*, *Zonites dallianus*, *Zonites singleyanus*, *Pæcilonites bermudiensis*, and *Hydrobia monroensis*.

PECK, J. T.—On the Anatomy and Histology of *Cymbuliopsis calceola*. J. H. U. Circ., VIII., p. 32, 1889.—Preliminary account.

WATASE, S.—On a new phenomenon of cleavage in the ovum of the Cephalopod. J. H. U. Circ., VIII., p. 33.—Preliminary account of segmentation in *Loligo pealei*.

HODGE, C. F.—A study of the oyster beds of Long Island Sound with reference to the ravages of starfish. J. H. U. Circ., VIII., p. 102, 1889.

RYDER, JOHN A.—The Byssus of the Young of the Common Clam. AM. NAT., XXIII., p. 65, 1889.

RYDER, JOHN A.—Notes on the Development of *Ampullaria depressa*. AM. NAT., XXIII., p. 735, 1889.

PILSBRY, H. A.—The radula in Rhipidoglossate Mollusca. Proc. Phila. Acad., 1889, p. 136.

CRUSTACEA.

LEIDY, JOSEPH.—A parasitic copepod. Proc. Phila. Acad., 1889, p. 95.—Describes as new *Chalimus tenuis* from *Leptocephalus*.

BROOKS, W. K. and HERRICK, F. H.—A preliminary abstract of researches on the life history of *Stenopus*. J. H. U. Circ., VIII., p. 29, 1889.

HAY, O. P. and W. P.—A contribution to the knowledge of the genus *Branchipus*. AM. NAT., XXIII., p. 91, 1889.

KINGSLEY, J. S.—The development of *Crangon vulgaris*. Third paper. Bull. Essex Inst., XXI., p. 1, 3 plates, 1889. (See AM. NAT., XXIII., p. 737.)

ANDREWS, E. A.—Autotomy in the Crab. AM. NAT., XXIV., p. 138, 1890.

HERRICK, F. H.—The development of the compound eye of *Alpheus*. Zool. Anzeiger, XII., p. 164, 1889.—Eye arises as thickening of ectoderm, thickened by immigration and delamination; differentiates into two layers: 1. Outer retinogen. 2.

Gangliogen. No invaginations occur. Ommatidium consists of two corneagen cells, four vitrellæ, and seven reticular cells. No nerve fibres are found in crystallin cones.

OSBORN, H. L.—Elementary Histological Studies of the Crayfish. XII. The Eye, *Am. Mo. Micro. Jour.*, X., p. 25, 1889. XIII. The Eye, l. c., p. 147, 1889.

CHANEY, L. W.—Some habits of the Crayfish. *Am. Mo. Micro. Jour.*, X., p. 86, 1889.—Eating, locomotion, oviposition, molting.

PACKARD, A. S.—The Cave Fauna of North America, etc. Mem. Nat. Acad. Science, IV., 1889.—Describes *Cauloxenus stygius*, *Canthocamptus cavernarum*, *Cæcidotæa stygia*, *C. nickajacensis*, *Crangonyx vitreus*, *C. packardi*, *C. antennatus*, *C. mucronatus*, *C. lucifugus*, *Cambarus pellucidus*, *C. hamulatus*; and gives notes on brain and optic organs of *Cæcidotæa* and *Cambarus*.

ARACHNIDA.

IVES, J. E.—*Linguatula diesingii* from the Sooty Mangubey. Proc. Phila. Acad., 1889, p. 31.

LEIDY, JOSEPH.—Note on *Gonyliptes* and *Solpuga*, l. c., p. 45. *Gonyleptis curvipes* from Chili and *Solpuga cubæ* from Florida.

MARX, GEORGE.—A contribution to the knowledge of the spider fauna of the Bermuda Islands, l. c., p. 98, 4 Pl. Catalogues twelve species as collected, one of which, *Lycosa atlantica*, is new.

PATTEN, WM.—Segmental sense organs of Arthropoids. *Jour. Morphol.*, II., p. 600. A preliminary paper giving an account of eyes and other sense organs of *Limulus*, spiders and scorpions.

WATASE, S.—Structure and development of the eyes of *Limulus*. J. H. U. Circ., VIII., p. 34, 1889. (See AM. NAT., XXIV., p. 81.) Preliminary communication.

JACKSON, C. Q.—The *Acarus folliculorum* in the human skin. *Microscope*, IX., p. 97, 1889.—Nothing new.

EMERTON, J. H.—Pairing of *Xysticus triguttatus*. *Psyche*, V., p. 169, 1889.

PACKARD, A. S.—The Cave Fauna of North America. Mem. Nat. Acad. Sci., IV., 1889.—Describes *Rhyncholophus caverna-*

rum n, *Bryiobia*? (or *Penthalæus*?) *meyerensis* n, *Laelaps*? (or *Holostaspis*?) *wyandottensis* n, *L.* (= *Iphis*?) *cavernicola* n, *Gamasus* (or *Hypoaspis*) *troglodytes* n, *G. stygius* n, *Damæus* (= *Delba*) *bulbipedata* n, *Oribata alata* n, *Uropoda lucifugus* n, *Sejus*? *samborni* n, *Obisium cavicola*, *Chthonius packardi*, *C. cæcus*, *Phalangodes robusta*, *Ph. flavescens*, *Ph. armata*, *Ph. spinifera*, *Phlegmacera cavicolens*, *Nemastoma troglodytes*, *N. inops*, and reprints Emerton's descriptions of cave Araneina (AM. NAT., IX., p. 278, 1875.)

MYRIAPODA.

BOLLMAN, C. H.—Notes on a small collection of Myriapods from the Bermuda Islands. Proc. Phila. Acad., 1889, p. 127. Four species catalogued, *Spirobolus heilprini* as new.

RONDEAU, KATE.—Note on the feeding habits of *Cermatia forceps*. AM. NAT., XXIV., p. 31, 1890.

PACKARD, A. S.—The Cave Fauna of America [etc.] Mem. Nat. Acad. Sci., IV., 1889.—Describes *Lysiopetalum lactarium*, *Pseudotremia cavernarum*, *Scoterpes copei*, *Zygonopus whitei*, *Cumbala annulata*, and gives notes on brain and sense organs of *Pseudotremia*.